

Appl. No. 09/723,713  
Amendment dated March 24, 2004  
Reply to Office Action of October 24, 2003.

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings of claims in the application:

**Listing of Claims:**

1-32. (Canceled)

33. (Currently Amended) A method of preventing or treating a disease characterized by amyloid plaques comprising A $\beta$  peptide, the method comprising administering DNA on multiple occasions in an effective regime to a patient, wherein the DNA encodes a polynucleotide encoding at least one antibody chain heavy and light antibody chains, the DNA being linked to promoter and enhancer elements, to a patient in an effective regime whereby the polynucleotide DNA is expressed to produce the an antibody chain and the antibody chain reduces levels of A $\beta$  in the brain of the patient, wherein the antibody chain specifically binds to an epitope within A $\beta$ 1-10, and is a chimeric, humanized or human antibody chain.

34-55. (Canceled)

56. (Previously Presented) The method of claim 33, wherein the antibody is a single-chain antibody.

57. (Previously Presented) The method of claim 33, wherein the antibody is of IgG1 isotype.

58. (Previously Presented) The method of claim 33, wherein the antibody is expressed in blood cells of the patient.

59. (Currently Amended) The method of claim 58, wherein the DNA polynucleotide encoding the antibody chain is operably linked to in operable linkage to immunoglobulin or CMV promoter and enhancer elements.

60. (Canceled)

Appl. No. 09/723,713

Amendment dated March 24, 2004

Reply to Office Action of October 24, 2003.

61. (Currently Amended) The method of claim 33, claim 53, wherein the antibody chain has the same binding specificity as antibody 10D5.

62. (Canceled)

63. (Currently Amended) The method of claim 33, wherein the DNA the nucleic acid is delivered via a virus containing the DNA the nucleic acid at a dosage of at least  $10^9$  virions.

64. (Previously Presented) The method of claim 33, wherein the antibody is a chimeric antibody.

65. (Previously Presented) The method of claim 33, wherein the antibody is a humanized antibody.

66. (Previously Presented) The method of claim 33, wherein the antibody is a human antibody.

67. (Previously Presented) The method of claim 33, wherein the antibody is humanized 10D5.

68. (New) The method of claim 33, wherein the antibody specifically binds to an epitope within A $\beta$ 1-5.

69. (New) The method of claim 33, wherein the dosages are administered once every week, once per every two weeks, once a month, once every 3 to 6 months, or yearly.

70. (New) The method of claim 33, wherein the intervals between the occasions are irregular as indicated by measuring blood levels of A $\beta$  in the patient.

71. (New) The method of claim 33, wherein a further dosage of the DNA is administered when the level of the antibody in the blood has declined to baseline measurement of the antibody in the patient before administration of the antibody.

72. (New) The method of claim 33, wherein the multiple occasions are over a period of at least six months.

Appl. No. 09/723,713  
Amendment dated March 24, 2004  
Reply to Office Action of October 24, 2003.

73. (New) The method of claim 33, wherein the DNA is administered in naked form.

74. (New) The method of claim 33, wherein the DNA is administered intravenously.

75. (New) A method of effecting prophylaxis of a disease characterized by amyloid plaques comprising A $\beta$  peptide, the method comprising administering DNA on multiple occasions in an effective regime to a patient, wherein the DNA encodes heavy and light antibody chains, the DNA being linked to promoter and enhancer elements, whereby the DNA is expressed to produce an antibody and the antibody reduces levels of A $\beta$  in the brain of the patient, wherein the antibody specifically binds to an epitope within A $\beta$ 1-10, and is a chimeric, humanized or human antibody.

76. (New) The method of claim 75, wherein the antibody is a single-chain antibody.

77. (New) The method of claim 75, wherein the antibody is of IgG1 isotype.

78. (New) The method of claim 75, wherein the antibody is expressed in blood cells of the patient.

79. (New) The method of claim 58, wherein the DNA-encoding the antibody is operably linked to immunoglobulin or CMV promoter and enhancer elements.

80. (New) The method of claim 75, wherein the antibody has the same binding specificity as antibody 10D5.

81. (New) The method of claim 75, wherein the DNA is delivered via a virus containing the DNA at a dosage of at least  $10^9$  virions.

82. (New) The method of claim 75, wherein the antibody is a chimeric antibody.

Appl. No. 09/723,713  
Amendment dated March 24, 2004  
Reply to Office Action of October 24, 2003.

83. (New) The method of claim 75, wherein the antibody is a humanized antibody.
84. (New) The method of claim 75, wherein the antibody is a human antibody.
85. (New) The method of claim 75, wherein the antibody is humanized 10D5.
86. (New) The method of claim 75, wherein the antibody specifically binds to an epitope within A $\beta$ 1-5.
87. (New) The method of claim 75, wherein the dosages are administered once every week, once per every two weeks, once a month, once every 3 to 6 months, or yearly.
88. (New) The method of claim 75, wherein the intervals between the occasions are irregular as indicated by measuring blood levels of A $\beta$  in the patient.
89. (New) The method of claim 75, wherein a further dosage of the DNA is administered when the level of the antibody in the blood has declined to baseline measurement of the antibody in the patient before administration of the antibody.
90. (New) The method of claim 75, wherein the multiple occasions are over a period of at least six months.
91. (New) The method of claim 75, wherein the DNA is administered in naked form.
92. (New) The method of claim 75, wherein the DNA is administered intravenously.
93. (New) A method of treating a disease characterized by amyloid plaques comprising A $\beta$  peptide, the method comprising administering DNA in an effective regime to a patient, wherein the DNA encodes heavy and light antibody chains, the DNA being linked to promoter and enhancer elements, whereby the DNA is expressed in blood cells of the patient to

Appl. No. 09/723,713

Amendment dated March 24, 2004

Reply to Office Action of October 24, 2003.

produce an antibody and the antibody reduces levels of A $\beta$  in the brain of the patient, wherein the antibody specifically binds to an epitope within A $\beta$ 1-10, and is a chimeric, humanized or human antibody.

94. (New) The method of claim 93, wherein the antibody is a single-chain antibody.

95. (New) The method of claim 93, wherein the antibody is of IgG1 isotype.

96. (New) The method of claim 93, wherein the antibody is expressed in blood cells of the patient.

97. (New) The method of claim 96, wherein the DNA encoding the antibody is operably linked to immunoglobulin or CMV promoter and enhancer elements.

98. (New) The method of claim 93, wherein the antibody has the same binding specificity as antibody 10D5.

99. (New) The method of claim 93, wherein the DNA is delivered via a virus containing the DNA at a dosage of at least  $10^9$  virions.

100. (New) The method of claim 93, wherein the antibody is a chimeric antibody.

101. (New) The method of claim 93, wherein the antibody is a humanized antibody.

102. (New) The method of claim 93, wherein the antibody is a human antibody.

103. (New) The method of claim 93, wherein the antibody is humanized 10D5.

104. (New) The method of claim 93, wherein the antibody specifically binds to an epitope within A $\beta$ 1-5.

Appl. No. 09/723,713  
Amendment dated March 24, 2004  
Reply to Office Action of October 24, 2003.

105. (New) The method of claim 93, wherein the dosages are administered once every week, once per every two weeks, once a month, once every 3 to 6 months, or yearly.

106. (New) The method of claim 93, wherein the intervals between the occasions are irregular as indicated by measuring blood levels of A $\beta$  in the patient.

107. (New) The method of claim 93, wherein a further dosage of the DNA is administered when the level of the antibody in the blood has declined to baseline measurement of the antibody in the patient before administration of the antibody.

108. (New) The method of claim 93, wherein the multiple occasions are over a period of at least six months.

109. (New) The method of claim 93, wherein the DNA is administered in naked form.

110. (New) The method of claim 93, wherein the DNA is administered intravenously.

111. (New) A method of effecting prophylaxis of a disease characterized by amyloid plaques comprising A $\beta$  peptide, the method comprising administering DNA in an effective regime to a patient, wherein the DNA encodes heavy and light antibody chains, the DNA being linked to promoter and enhancer elements, whereby the DNA is expressed in blood cells of the patient to produce an antibody and the antibody reduces levels of A $\beta$  in the brain of the patient, wherein the antibody specifically binds to an epitope within A $\beta$ 1-10, and is a chimeric, humanized or human antibody.

112. (New) The method of claim 111, wherein the antibody is a single-chain antibody.

113. (New) The method of claim 111, wherein the antibody is of IgG1 isotype.

Appl. No. 09/723,713

Amendment dated March 24, 2004

Reply to Office Action of October 24, 2003.

114. (New) The method of claim 111, wherein the antibody is expressed in blood cells of the patient.

115. (New) The method of claim 114, wherein the DNA-encoding the antibody is operably linked to immunoglobulin or CMV promoter and enhancer elements.

116. (New) The method of claim 111, wherein the antibody has the same binding specificity as antibody 10D5.

117. (New) The method of claim 111, wherein the DNA is delivered via a virus containing the DNA at a dosage of at least  $10^9$  virions.

118. (New) The method of claim 111, wherein the antibody is a chimeric antibody.

119. (New) The method of claim 111, wherein the antibody is a humanized antibody.

120. (New) The method of claim 111, wherein the antibody is a human antibody.

121. (New) The method of claim 111, wherein the antibody is humanized 10D5.

122. (New) The method of claim 111, wherein the antibody specifically binds to an epitope within A $\beta$ 1-5.

123. (New) The method of claim 111, wherein the dosages are administered once every week, once per every two weeks, once a month, once every 3 to 6 months, or yearly.

124. (New) The method of claim 111, wherein the intervals between the occasions are irregular as indicated by measuring blood levels of A $\beta$  in the patient.

Appl. No. 09/723,713  
Amendment dated March 24, 2004  
Reply to Office Action of October 24, 2003.

125. (New) The method of claim 111, wherein a further dosage of the DNA is administered when the level of the antibody in the blood has declined to baseline measurement of the antibody in the patient before administration of the antibody.

126. (New) The method of claim 111, wherein the multiple occasions are over a period of at least six months.

127. (New) The method of claim 111, wherein the DNA is administered in naked form.

128. (New) The method of claim 111, wherein the DNA is administered intravenously.